

(19) World Intellectual Property  
Organization  
International Bureau



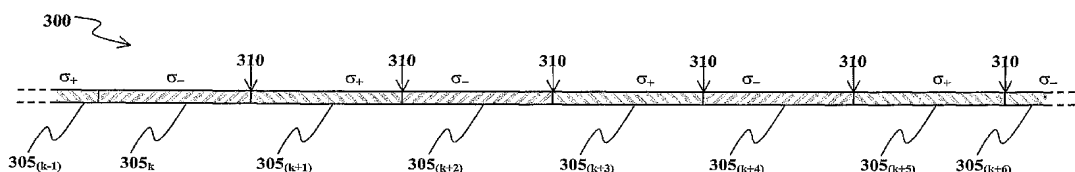
(43) International Publication Date  
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number  
**WO 2005/064370 A1**

- (51) International Patent Classification<sup>7</sup>: **G02B 6/10**, H04B 10/18, G02B 6/16
- (74) Agents: **MACCALLI, Marco** et al.; c/o Maccalli & Pezzoli S.r.l., Via Settembrini, 40, I-20124 Milano (IT).
- (21) International Application Number: PCT/EP2004/053545
- (22) International Filing Date: 16 December 2004 (16.12.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
PCT/EP03/51118 30 December 2003 (30.12.2003) EP  
PCT/EP2004/050521 14 April 2004 (14.04.2004) EP
- (71) Applicant (for all designated States except US): **PIRELLI & C. S.p.A.** [IT/IT]; Via Gaetano Negri, 10, I-20123 Milano (IT).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **DEBUT, Alexis** [FR/IT]; c/o Pirelli Cavi e Sistemi Telecom S.p.A., Viale Sarca, 222, I-20126 Milano (IT). **SARTORI, Francesco** [IT/IT]; c/o Pirelli Cavi e Sistemi Telecom S.p.A., Viale Sarca, 222, I-20126 Milano (IT). **TRAVAGNIN, Martino** [IT/IT]; c/o Pirelli Cavi e Sistemi Telecom S.p.A., Viale Sarca, 222, I-20126 Milano (IT).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LOW POLARISATION MODE DISPERSION (PMD) OPTICAL FIBER LINK, AND METHOD OF MAKING THE SAME



(57) Abstract: An optical fiber link (300) comprises a plurality of optical fiber spans (305<sub>(k-1)</sub>, ..., 305<sub>(k+6)</sub>) joined one to the other, the plurality of optical fiber spans including at least one first unidirectionally-spun optical fiber span (305<sub>(k-1)</sub>, 305<sub>(k+1)</sub>, 305<sub>(k+3)</sub>, 305<sub>(k+5)</sub>) and at least one second unidirectionally-spun optical fiber span (305<sub>k</sub>, 305<sub>(k+2)</sub>, 305<sub>(k+4)</sub>, 305<sub>(k+6)</sub>) having mutually opposite spinning directions.

WO 2005/064370 A1